An Introduction to Programming with Mathematica® (Second edition). By Richard Gaylord, Samuel Kamin and Paul Wellin. Springer-Verlag, New York. (1996). 452 pages. DM 72.00 (diskette included).

Contents:

Preface. 1. Preliminaries. 2. A brief overview of *Mathematica*. 3. List manipulation. 4. Functions. 5. Evaluation of expressions. 6. Conditional function definitions. 7. Recursion. 8. Iteration. 9. Numerics. 10. Graphics programming. 11. Applications. 12. Contexts and packages. References. Index.

Metamorphosis: A Guide to the World Wide Web & Electronic Commerce. Patrick G. McKeown and Richard T. Watson. John Wiley & Sons, New York. (1996). 159 pages. $17.95.

Contents:

Preface. 1. Introduction to the Internet and World Wide Web. 2. Introduction to browsers. 3. Using Netscape. 4. Creating Web documents. 5. Web searching and other Internet resources. 6. Business and the Internet. A. Special characters. Glossary. Index.

Combinatorial Geometry. By János Pach and Pankaj K. Agarwal. John Wiley & Sons, New York. (1995). 354 pages. $45.00.

Contents:

Preface. I. Arrangement of convex sets. 1. Geometry of numbers. 2. Approximation of a convex set by polygons. 3. Packing and covering with congruent convex discs. 4. Lattice packing and lattice covering. 5. The method of cell decomposition. 6. Methods of Blichfeldt and Rogers. 7. Efficient random arrangements. 8. Circle packings and planar graphs II. Arrangements of points and lines. 9. Extremal graph theory. 10. Repeated distances in space. 11. Arrangement of lines. 12. Applications of the bounds on incidences. 13. More on repeated distances. 14. Geometric graphs. 15. Epsilon nets and transversals of hypergraphs. 16. Geometric discrepancy. Hints for exercises. Bibliography. Index of symbols. Author index. Subject index.

Philosophy and AI: Essays at the Interface. Edited by Robert Commins and John Pollock. MIT Press, Cambridge, MA. (1991). 304 pages. $15.00.

Contents:

List on contributors. Introduction. 1. Plans and resource-bounded practical reasoning (Michael E. Bratman, David J. Israel, and Martha E. Pollack). 2. Cross-domain inference and problem embedding (Robert Cummins). 3. The foundations of psychology: A logico-computational inquiry into the concept of mind (Jon Doyle). 4. Memory, reason, and time: The step-logic approach (Jennifer J. Elgot-Drapkin, Michael Miller, and Donald Perlis). 5. Artificial intelligence and hard problems: The expected complexity of problem solving (Clark Glymour, Kevin Kelly, and Peter Spirtes). 6. Normative and descriptive ideals (Henry Kyburg). 7. Ampliative inference, computation, and dialectic (R.P. Loui). 8. Probabilistic semantics for nonmonotonic reasoning (Judea Pearl). 9. OSCAR: A general theory of rationality (John L. Pollock). 10. Models and minds: Knowledge representation for natural-language competence (Stuart C. Shapiro and William J. Rapaport). 11. Implementing the intentional stance (Yoav Shoham). 12. The dinosaur debate: Explanatory coherence and the problem of competing hypotheses (Paul Thagard). Index.

Polynomial and Matrix Computations: Fundamental Algorithms, Volume 1. By Dario Bini and Victor Y. Pan. Birkhäuser, Boston. (1994). 415 pages. $64.50.

Contents:

Preface. 1. Fundamental computations with polynomials. 2. Fundamental computations with general and dense structured matrices. 3. Bit-operation (Boolean) cost of arithmetic computations. 4. Parallel polynomial and matrix computations. Bibliography. Index.

The Little Schemer (Fourth Edition). By Daniel P. Friedman and Matthias Felleisen. MIT Press, Cambridge, MA. (1996). 196 pages. $16.50.

Contents:

Contents. Foreword. Preface. 1. Toys. 2. Do it, do it again, and again, and again ... 3. Cons the magnificent. 4. Numbers games. 5. *Oh my gawd*: It's full of stars. 6. Shadows. 7. Friends and relations. 8. Lambda the ultimate. 9. ... and again, and again, and again, ... 10. What is the value of all of this? Intermission. Index.

The Seasoned Schemer. Daniel P. Friedman and Matthias Felleisen. MIT Press, Cambridge, MA. (1996). 210 pages. $18.50.

Contents:

Contents. Foreword. Preface. 11. Welcome back to the show. 12. Take cover. 13. Hop, skip, and jump. 14. Let there be names. 15. The difference between men and boys ... 16. Ready, set, bang! 17. We change, therefore we are! 18. We change, therefore we are the same! 19. Absconding with the jewels. 20. What's in store? Welcome to the show. Afterword. Index.